

## REMARKS

The Final Official Action dated June 13, 2005, has been received and its contents carefully noted. The specification has been amended as set forth herein. Claim 7 has been amended in order to correct a typographical error and claims 1 and 6-10 are presently pending in the application with claims 8-10 being withdrawn from further consideration by the Examiner.

With reference to paragraph 1 of the Office Action, the added material was objected to under 35 U.S.C. § 132(a) as containing new matter. Applicants, respectfully submit the amended specification is in full compliance of 35 U.S.C. § 132(a).

With reference to paragraph 2 of the Office Action, claim 7 is objected to as containing informality. Claim 7 has been amended to correct a typographical error by replacing "MG" with --Mg--. Accordingly, Applicants respectfully request withdrawal of the objection.

With reference now to paragraphs 3 and 4 of the Office Action, the specification has been objected to as containing informalities. The specification has been amended to comply with the Examiner's objections. Accordingly, Applicants respectfully request withdrawal of the objection.

Turning now to paragraphs 6-8, claims 1, 6-7 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over EP 0 896 134 A2.

Independent claim 1 recites a catalyst for exhaust gas purification comprising a NO<sub>x</sub> absorbent material which absorbs NO<sub>x</sub> in an exhaust gas in an environment of excess oxygen whose exhaust gas oxygen concentration level is high whereas when the exhaust gas oxygen concentration level becomes lower in a given temperature range, the NO<sub>x</sub> absorbent material releases the absorbed NO<sub>x</sub>, a precious metal and a Ce-Pr mixed oxide which releases a maximum amount of oxygen in the given temperature range wherein the Ce-Pr mixed oxide is supported on a substrate and is presented in amounts ranging from 15 to 300g per 1 litre of the substrate. Similarly, independent claim 7 recites a catalyst for exhaust gas purification comprising a NO<sub>x</sub> absorbent material formed of at least one Ba, K, Sr, and Mg, a precious metal, and a Ce-Pr mixed oxide. The catalyst being placed in an exhaust gas of which an oxygen concentration level becomes relatively high in a first period and becomes relatively low in a second period, the first period and the second period being alternately repeated,

wherein the Ce-Pr mixed oxide is supported on a substrate and is present in amounts from ranging from 15 to 300g per 1 litre of said substrate. Each of these claims recite features which are neither disclosed in nor remotely suggested by the European Publication.

European Patent Publication discloses the utilization of Ce-Pr composite oxide in place of ceria in the catalyst containing NO<sub>x</sub> absorbing material, a noble metal and ceria as noted from page 5, paragraph 19. The European Patent Publication does not mention any relationship between the ability of the Ce-Pr composite oxide to absorb and release oxygen and the temperature. The reference merely discloses replacement of ceria with Ce-Pr composite oxide is intended for improvement of heat resistance of the catalyst. Moreover, this reference fails to disclose or suggest how the Ce-Pr composite oxide acts on NO<sub>x</sub> purification during air/fuel ratio lean operation. In view of the foregoing it is respectfully submitted that even a person skilled in the art cannot and would not derive from the reference, the present invention which sets the support amount of the Ce-Pr composite oxide at 15 to 300g per liter of a substrate.

It is further noted that the reference mentions, at page 9, paragraph 43, that ceria was born 78g per liter of the honeycomb bed. It is impossible, however, to derive the support amount of the Ce-Pr composite oxide in the present invention from that mentioned for the ceria amount in the European Publication because the Ce-Pr composite oxide and the ceria are not the same as one another. It is a well known fact among those skilled in the art that it is difficult to predict the ability of the catalyst when the types of materials to be added in the catalyst are changed. Accordingly, it is also difficult for one of ordinary skill in the art to predict the effect of adding the Ce-Pr composite oxide in place of the ceria. Unless the effect is known to set the amount of the Ce-Pr composite oxide would certainly not be within the cognizance of one of ordinary skill in the art based on the teachings of the European Publication. Therefore, the Examiner's reliance on *In re Boesch* and *In re Aller* are misplaced as the claimed invention is directed to Ce-Pr composite and not the optimization of ceria. *See generally, In re Boesch*, 617 F.2d 272 (CCPA 1980); *In re Aller*, 220 F.2d 454 (CCPA 1955).

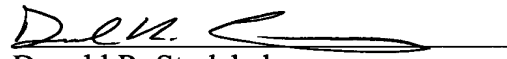
In summary, the Examiner simply tries to cure the deficiencies of the European reference by a misplaced reliance upon case law without any factual support. In addition, the Examiner goes on to state the "Ce-Pr mixed oxide" of the European reference "inherently posses the same properties, e.g., the same effect of Nox purification during air/fuel ratio lean operation" (Office Action at 5.) Even if assuming the alleged optimization was correct,

which it is not as the optimization is directed to ceria and not Ce-Pr the properties would not be inherent. More specifically, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art). The Examiner's reliance upon inherency is simply improper.

In view of the foregoing it is respectfully requested that the rejections of record be reconsidered and withdrawn by the Examiner, that claims 1, 6 and 7 be allowed and that the application be passed to issue.

Should the Examiner believe a conference would be of benefit in expediting the prosecution of the instant application, he is hereby invited to telephone counsel to arrange such a conference.

Respectfully submitted,

  
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